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TRANSCRIPT:

STAFF: Good afternoon, and welcome to today's space shuttle accident briefing. Before I introduce the administrator, I need to pass along a couple of notes.

We're pressed for time today, so we will have to end today's briefing at 4 o'clock. If we run long, Administrator O'Keefe may have to leave, so please bear with us.

To get to as many reporters as possible, we will only be able to take one question per reporter today. And with us, and as with all previous briefings, please wait until you have the microphone before asking your questions. And remember to give us your affiliation.

With that, we have Administrator Sean O'Keefe, Bill Readdy, associate administrator of space flight, and Michael Kostelnik, deputy associate administrator of the International Space Station and space station programs.

We'll begin with a brief statement by Administrator O'Keefe.

O'KEEFE: Thank you, Glenn (ph).

Since about 1 o'clock on Saturday, February the 1st, we've had an opportunity to get together on a regular basis with a series of press briefings to update you on developments, provide the facts and the evidence that we've had an opportunity to collect or that's been made available to us, and over the course of that time since early afternoon on the 1st of February, last Saturday, an awful lot of information has come to light, to be sure, but very importantly I think the approach that we have taken here is an effort, not only to be forthcoming with the public and make sure that all the evidence and information, in fact, is made available, but also it's turned out to be an extremely useful approach so that others who are examining information or data or imagery or whatever

else, pictures, have had an opportunity then to advise us of what they believe they have that might be pertinent or helpful in that process.

So this has been an extremely useful approach and I want to thank the members of the media particularly, and the public in general, I think, for the overwhelmingly positive and helpful response of trying to gather that information and the evidence as we've worked through what has been our effort to gather the information, collect the evidence, bring to bear all the facts necessary in our quest to determine exactly what caused this terrible, horrific accident on the morning of Saturday, February the 1st.

Our approach at this stage now is, given those daily press reviews, is to now transition a bit, if you will, to a more structured approach that will be taken from this stage forward, rather than a daily press conference from NASA directly, because, again, our attempts have been to release all the information we know at the time we have it available--is instead now, I think what you'll begin to hear and see more specific commentary from is the Columbia Accident Investigation Board, chaired by Admiral Hal Gehman.

We'll have an opportunity to discuss more thoroughly the scope and pace of the investigation that is being undertaken to determine, again, the causes of this horrific accident.

Tomorrow, Admiral Gehman, I'm advised, will conduct a press conference from Houston, introduce the members of the Columbia Accident Investigation Board, and give a presentation then on where they the pace of the investigation proceeding.

So at that stage in the game, I think the appropriate course is we will defer to the Columbia Accident Investigation Board to set the pace, if you will, of discussions of how the investigation itself is progressing and the activities or relevant events they see as appropriate. So I would suggest to the members of the media to consult with them and await their determination tomorrow of the frequency or scope of activities they intend to conduct.

NASA will continue to release information and facts and evidence as we collect it on a more--a less structured basis, but on a periodic basis as we see the information come available. Again, an awful lot has occurred in the last nine days, all of it having been released in the manner that we have. We'll continue to do that as we see appropriate. So stay tuned: We'll be scheduling press opportunities to the extent that we have things to release and make available.

But in terms of the pace of the investigation and the conduct of how the activities will be conducted, from that standpoint, Admiral Gehman will give you much more on that tomorrow. So we're moving this as real-time as we can do. But at the same time, being as fully disclosive in terms of the approach that is being conducted there.

It also is a reflection, I think, of the manner in which we intend to fully support and assure that the Columbia Accident Investigation Board has the independence and the objectivity to proceed as they see appropriate.

Again, our focus has been to assure that they have all the information and all the material available. They are now progressively, I think, working through the range of different issues that are necessary in order to assure that information or data that has been locked down within about half an hour after the contingency plan was activated on that fateful morning of February the 1st--they're now in a position of advising when they believe that information can released in terms of, you know, various steps that can be done for software and hardware that are controlled within the NASA community, at which stage that can be released for continued operations, if you will.

So as it effects everything from launch pads to analyses that are being conducted, whatever else, they have a very direct and important, I think, function and role in assuring that information is as thoroughly reviewed and examined by the board prior to the time that is either archived or set aside for future reference as we move through this. So it's all active, all available.

In addition, early on in this process I think many of the media are aware, and certainly some of the general public, as well, that by Sunday afternoon our inspector general, Robert Cobb, was on the ground at Barksdale Air Force Base in Shreveport, Louisiana, and from that point forward has been an observer and engaged in a specific activity with the Colombia Accident Investigation Board.

So he is also an opportunity to guarantee that, as we work through this, his instructions very clearly, are--and under the terms of the Inspector General Act, he reports not only to the president, but also to the Congress that he understands and appreciates that his primary responsibility is to guarantee the independence, the objectivity of the board, and that we are doing everything we possibly can at NASA to assure that.

So, we're attempting to take as many steps as we can here to make sure that we're all in pursuit of the same objective, which is to find out what it is that caused this accident, and to determine that set of causes as expeditiously but as thoroughly as Admiral Gehman and the Columbia Accident Investigation Board can do so.

That's critically important so that we can then get about to business of figuring out what the solution is that we may need to work through. And then, in turn, after having those answers, determine how we can then resume safe flight operations as expeditiously as possible. Those are our objectives, those are the ones the board clearly understands and appreciates what our intentions are in that regard.

And so, in our quest and pursuit of that, we're in pursuit of the answers, and we're trying to determine exactly how that can be derived. But ultimately we'll be guided by their recommendations, their findings of the Columbia Accident Investigation Board. And my intention upon receipt of those recommendations is to make their recommendations, their findings, available to the public simultaneously.

So I have no intent, nor is anyone here within our NASA community intent upon analyzing that report or whatever. We'll do that in due course. But it is a responsible--I think a responsibility we have to the public to make sure that all of that informed judgment on their part is made available.

So I want to assure in every way possible that all of us within the NASA community are cooperating and participating in that activity to help reach that mutual objective of determining the answers, finding the solutions, and getting back to safe flight operations as soon as we can.

Over the course of the weekend, I had--and Friday--Jesus, it seems like forever ago now, but it was just recently--on matter of fact Thursday morning I was at Kennedy Space Center--Thursday evening I was at Kennedy Space Center. Friday morning I attended a memorial service there. Then had an opportunity to examine the facilities where we will be bringing all and transporting all of the evidence and the debris that has been collected thus far and will continue to be along that 500-mile swathe that is now very familiar to all the members of the media, between Fort Worth and Louisiana-Texas border just south of Shreveport, in order to array that data and all of the debris at the facility there at Kennedy Space Center.

It is a large hanger and one that we've examined directly. It's being prepared for receipt of all of the material as it arrives.

And at this juncture, I'm advised there are some 12,000 pieces that have been collected at the various collection points in and around the Lufkin, Texas, area particularly. Transported then to Barksdale Air Force Base and the facilities we maintain there for storage and collection and tagging--proper identification of the evidence as is understood right then and the debris that has come off the orbiter upon re-entry, then for the purpose of transporting it to Kennedy Space Center.

So I've, kind of, followed that path along from Friday morning forward to examine not only the facilities where it'll ultimately arrive, but then in turn we went to Houston to meet with Admiral Gehman and his board members, advised them of the procedure we are proceeding with. He has concurred in our treatment of the debris, having spent the week as he did there in the Barksdale area and all the collection points around it, and understands exactly how the recovery process is under way as we're moving through this.

We also visited, again, all the command centers at Lufkin, Texas. Talked to not only the NASA team that's there, but also our emergency response coordination team from FEMA, representatives from the FBI, the Texas Department of Public Safety, the National Guard members who were there working through each of the areas around the Sabine Forest trying to collect each of the items of debris as we've moved along.

We then went from there up to the Barksdale Air Force Base--this is all on Saturday--to examine the facilities of where the receipt points are of everything and all the debris that's being transported there that will then in turn be packaged and put aboard transports and sent to Kennedy for the roughly 18-to 20-hour drive that it's going to take to get it there.

So this is a process that we're organizing as carefully as we know how to treat the material, the debris to get some clues about exactly what happened on that morning, over the span of that less than 20 minutes between the time that everything was normal to the time that it should have landed and ascertain exactly what occurred at that stage.

All the evidence and pieces of debris, as well as parts of the orbiter that have been coming forward now, all of them have occurred--or the pieces have been identified from just an area a little bit west of Fort Worth--that's the last confirmed piece that we have--all the way to some 250 items or pieces of the orbiter that have been collected and transported in the state of Louisiana up to Shreveport.

Everything in between that area totals that roughly 12,000 pieces that have been either in the point of identification and are now in the transportation phase to one of those major collection points around Lufkin or are at Barksdale.

The shipments to Kennedy Space Center and the Cape Canaveral area will begin today and tomorrow, and the first arrivals of the pieces that we have collected and tagged and tried to identify as best that could be at that time will be arriving there Wednesday, is the expectation at this point.

There are--again, as we've reiterated several times in our respective information briefings that we've tried to provide to update the public on the progress of the activities and the effort and the recovery phase of examining and identifying the debris as we've moved along, there is no favorite theory. There is no preferred or optimal or considered more likely or more probable consequence or cause that we see that's developing at this stage. Everything is on the table.

If anything, the Columbia Accident Investigation Board--I think very helpfully, early in this process, again, one of the great advantages of having activated that board in accordance with the contingency plan that we had developed as one of the important post-Challenger lessons learned

was they recommended that we utilize a fault tree analysis of looking at every element of what could have gone wrong once we got the initial sensor readings that began to indicate problems as early as 8:53 Eastern time on the morning of February the 1st, and then analyzing each of that data to determine exactly what other potential causes could have moved from that, using that fault tree analysis.

And before discontinuing any pursuit on any branch of that tree, if you will, the Columbia Accident Investigation Board is examining that information before that particular analysis is closed out.

So it's become a very methodical, very structured process to assure that we aren't defaulting in the direction of one favored approach or one favored theory or one more today vox populi theory versus another, so that we're not then in turn seeing a trail that could have been pursued, then start to go a little cold as we work through it.

And, again, this is a very structured approach that is born of the vast experience that the Columbia Accident Investigation Board members bring to this really important challenge of trying to determine the answer to what caused this accident of more than 50 accidents they've been involved in collectively as members.

So bringing to bear all of the experience they've had in looking at various airline incidents, military aircraft incidents, you name it, any number of different mishap investigations, accident investigations, tragedies they've been involved in, USS Cole, you name it.

All of those kinds of experiences are far more than what anyone or any collection of the deep expertise we have here at NASA could possibly hope to match.

And so we're being guided by the methodology that they have in bringing the collective experience they bring to bear to assure that we're looking at every dimension of this and not closing out or inadvertently ignoring some range of opportunities to examine what the causes could have been in these cases.

And that has proven to be exceptionally beneficial and one of the great advantages of having activated that board within hours after this incident occurred.

The Gehman board was identified and named by mid-afternoon of Saturday, September (sic) the 1st; their first meeting was via telecon by 5 p.m. that evening. They were all advised to plan to report to Barksdale Air Force Base the next day by Admiral Gehman. The deputy administrator here, Fred Gregory (ph), made arrangements and escorted several of the members, picked them up along the way--along the process, the next day and brought them to Barksdale Air Force Base. Everyone was there in meeting by mid-afternoon, Sunday, the 2nd of February. That's the way most accident and mishap investigation board efforts work.

And it's one of the lessons learned from post-Challenger, it's the way the National Transportation Safety Board does operations. There's a range of different other parallel benchmarks that we've used in this case and it's proven to be an exceptionally useful approach to how we proceed to assure we're on top of the evidence and information from the moment that it occurred and forward to this time.

As Glenn (ph) mentioned, I'm going to have to wrap up a little bit early here, but my colleagues will be here through the next 40 minutes or so. I'm going to have to dismiss myself here in about 20 minutes for further discussions with colleagues at the White House on a variety of different questions we're working with.

But Bill Readdy, again, the associate administrator for space flight and a gent who I've been with seemingly every moment of every day for the past nine days, we were together at the skid strip at Kennedy Space Center on the morning of the 1st of February anticipating in a very upbeat mood the arrival of STS-107 after an extremely beneficial, extremely successful mission they had conducted.

And so we've been together throughout this entire activity and he certainly can give you a perspective that we've been working through as a consequence of that, as well.

Also Mike Kostelnik, our deputy associate administrator for space station and space shuttle programs, in recognition of the very close association between two of those elements, is with us here to work through some of these discussions.

And neither of them are strangers to you. After the course of the past nine days of activities they have been the folks who've conducted most of the discussions here out of NASA headquarters, as we've then transferred to discussions at Johnson.

So in sum, let me just reiterate again that the investigation proceeds apace. It's moving at a very, I think, important rate at this stage, as the evidence and material debris has been collected and is moving now toward consolidation, if you will, at the Cape Canaveral Kennedy Space Center. And all the evidence we're collecting at this point, all the facts and material and analyses we're conducting out of either the Johnson Space Center or here at headquarters or at the Marshall Space Flight Center in Huntsville, Alabama, or at Kennedy Space Center are all being coordinated through the activities of the Columbia Accident Investigation Board to assure that we're looking at every possible dimension of what could have occurred here and eliminating no approach or theory as we've moved through this as a means to devise those answers and come to the conclusion of what caused this horrific accident.

And at this juncture, you know what we know at this juncture by virtue of all the information that has been released. And that is the sum and summation in all of its volume that has been released to date--it's on the web sites, that's been publicly discussed at great length--is where we are at this juncture. And so from here on, trying to assemble these facts into some order that will then give us a more comprehensive look based on the extended background that all the members of the investigation board have to help us reach some understanding of what they think led to this particular tragedy is what we're in pursuit of at this juncture.

So with that, let me open it up to questions. And again, thank you all for your patience and willingness to be here this afternoon.

QUESTION: Mr. O'Keefe, despite your reference to make the investigation board independent, there has been criticism on the Hill of the level of independence that they believe you've achieved. What's the problem with having a blue ribbon presidential commission like the Rogers commission?

O'KEEFE: Nothing. I mean, it would have taken more time. We would have had to really scramble to find folks who had not been aware of the incident. And therefore, it would have taken us a while to put together a group. And in the course of that time that it would take to do so, an awful lot of the trails might have gone cold.

So it was, you know--I think the contingency plan that was developed post-Challenger that was updated as a document as recently as September; we ran a simulation of it, secure in the knowledge that we'd never have to use such a thing, in November. And as fate had it, it was extremely beneficial to have done all that due-diligence in advance.

And in that contingency plan, very specifically calls out the establishment of an investigation board that is composed of--named in the contingency plan--the individual external to NASA investigative agencies and departments who have expertise in safety and mission assurance, flight certification requirements, accident investigation, recognizance within their respective departments, all folks who have no direct association with NASA at all.

The only two parts of the contingency plan that left some flexibility on the part of NASA to make a determination at the moment was the naming of a chair, as well as the assignment of one individual from NASA who would have to be, by the way the contingency plan was organized, a center director not associated with the space flight community.

And so the two choices we made in those first few hours was to call Admiral Hal Gehman, make an appeal to him based on his long public service that he was required yet again for an opportunity to examine this. Because again, he has absolutely no prior association with NASA at all, but has an extended background, given his very, very distinguished naval service career, as well as very specifically the USS Cole investigation, in which he conducted that activity and pulled together a lot of disparate capabilities and resources in order to conduct that task.

And the second choice was to name a non-space flight center director--in this case Scott Hubbard, who is a very recently named center director from Ames Research Center, just south of San Francisco.

The reason we selected him was because he had been involved in the Mars lander investigation a few years ago, that you recall. And as a result, his understanding of mishaps and accidents that occur from the NASA perspective, he has some track record there, but not related to the space flight community at all.

He was a staff scientist at the Berkeley labs at the University of California-Berkeley years ago. Went out as an entrepreneur on his own and formed a company and came back to NASA, to NASA Ames, just a few years ago as a scientist at Ames until he was elevated to the position of center director in September, I want to say.

So he has a very removed kind of association with the space flight community, to be sure, but a great expertise in understanding the causes and effects that lead up to that.

So this is a testimonial, I think, to the fact that the post-Challenger planning that has occurred was immediate, we did not lose any time at all.

And, again, I don't have any particular objection to a debate that says how should you organize this and look at it. There's all kinds of different ways to do this. But the one that we opted was the one that was part of the contingency plan we had hoped to never have to use.

And its great virtue was that it was immediate, it was thorough and it includes a lot of folks with a really extensive experience in dealing with accidents in the aerospace community, as well as in a range of other conditions.

So the expertise that could be developed there, we would have spent a lot of time trying to assemble a group if we had started with a clean sheet of paper that afternoon. And among the things we worried about that afternoon, that mercifully was not on it, because we had the contingency plan right there and available, and that was the best judgment at the time, and I have no difficulty standing by that judgment.

We are continuing to--again, any time, any circumstance that is offered to suggest an expansion of that board to include other expertise, I've deferred that entirely to Admiral Gehman, and he is making judgments about what other expertise he might benefit by having available to him.

He is making plans right now to make available engineers, scientists, analysts from way outside the NASA community to advise them in terms of how to look at the information.

So everything and anything that that board requires in order to come up with an objective position on this is exactly what we're in pursuit of.

And that's the stance we've taken. There's lots of other ways to do it, but that's the one we chose and is certainly is moving in a direction that I think is going to give us a fighting chance of coming up with a judgment that is unbiased and uncluttered by whatever view we might otherwise put to it within the NASA community based on the viewpoints that we feel are very important.

QUESTION: Real quick one. Has NASA, has the United States asked Russia for an additional Progress flight, and if so, when, and if so, what concessions, what money are we prepared to give the Russians to make this journey?

O'KEEFE: Well, let me, I guess, try a bit of a backdrop for those who may not have followed this issue as closely as you obviously have.

The International Space Station is doing very well. Ken Bowersox, Don Pettit and Nicolai Budarin are just--frankly, they are in a better mood than I think most folks associated with NASA these days by virtue of the fact they're continuing their mission, they've got a science set of objectives they're working on and they're working through that agenda and doing real well.

We've talked to them a couple of times and they seem to be extremely upbeat. My last conversation with Captain Bowersox was, ``Don't worry about us, you know where to find us, and we're not going anywhere; everything's fine.'' So they're in good spirits and moving along.

A Progress flight was launched from Kazakhstan on Sunday, and arrived Monday afternoon, evening, aboard the International Space Station. That now has sufficient provisioning that will last at least until June, we're told.

Went through an extensive discussion on all of the support requirements we have for station for the extended duration with our International Space Station team down at the Johnson Space Center on Friday evening while I was there, after I met with the Gehman board.

I spent an extended time with Bill Gerstenmaier and his outstanding team down there to look at what the pacing items are. We've got enough fuel, for example, to last for another year, a year and a half, which is useful for the purpose of adjusting orbit and altitude and all the other maneuvering requirements that may be had in addition to powering the station itself.

The real pacing item is going to be water. It's one of those aspects that, again, roughly half of the provisioning that's done typically comes from most of the shuttle flights that we send to install new sections and segments aboard the International Space Station.

And in addition to that, it brings up additional logistics requirements, typically requires the water requirements that will support three crew members.

So what we're looking at is all the options right now of what it will take in order to adjust Progress flights, to look at the Soyuz emergency egress vehicle capacity that is currently docked aboard

station, when its service life will come against its design limits, which will be some time in April-May time frame--or beyond that, actually into May. And we're looking at what the flight schedule is now for Soyuz, which had been planned, how we adjust that, what approaches may do. All in consultation with our partners.

Fred Gregory is the chair of the multilateral control board for the International Space Station. So the deputy administrator is the chair of that particular group that looks at operations and configuration options for International Space Station. We're consulting with all of our partners on station now to look at what those options may entail, to include the possibilities as you've just referred to. But that's one of many, many.

And we're considering every element of this, knowing with confidence that for the time being, for the near term, through June, the station is well supported, the folks are in great shape, and they have a regular contact and regular discussion with us to ascertain how we're progressing on this.

And our strongest hope would be to be able to return to flight safely in order to support them and the mission exchange. But to the extent that those options are not possible, we have a range of other considerations we can work through to include how to stagger or vary the Progress flights, the Soyuz flights. And we're in the middle of beginning to engage with not only our Russian partners, but also the European Space Agency, the Japanese Space Agency, the Canadian Space Agency, all of which are members of our International Space Station partnering team to determine what the full range of those options are and how we can support station best and keep those operations going.

QUESTION: Question earlier about the CAIB; Congressman Gordon has issued several press releases, including letters to the president which call into question some of the independent issues of the board and has asked for a Rogers-like commission to be appointed. Have you spoken to the White House about this? Can we expect them to respond formally in advance of Wednesday's hearings? Or do you expect to address this in a formal way conveying the White House's intent on Wednesday?

O'KEEFE: The first opportunity I had to discuss the composition of our investigation and the board membership with members of Congress, I met Monday evening with the leadership of the House and Senate, as well as the leadership of the Committees on Science and Commerce, the two authorizing committee of the House and Senate that have oversight responsibility for NASA activities; the chairs and ranking members of appropriations, met with them, as well. And we had a rather extensive review that evening over all the activities that had gone on as of that time, so it was one week ago today.

Since that time, I've met several times with the leadership again, as recently as Tuesday, with all--a number of members of the House and Senate again on Thursday and Wednesday evening. So in the course of the discussions with them to advise where we're proceeding, certainly there have been a variety of different views expressed.

We've had a very spirited exchange on different approaches on how we should consider going about the investigation. And I've advised my colleagues at the White House of each of those discussions and how we're progressing on it.

So any individual member of Congress certainly always is entitled to their opinion, and we're always delighted to work with them on differing ideas in what we are sure is their pursuit and common, I think, support of our objective, which is to run to ground what are the facts of this case, to find the answers on what caused this terrible accident, to determine what the solutions are to fix it. And we're hopeful they are very supportive of our objectives to get back to flying

safely as soon as possible. So we're happy to entertain that discussion with all members of Congress, and I have.

QUESTION: Mr. O'Keefe or the other two gentlemen, is there any more word on the wing fragment that was found late last week, whether it's from the left or right side? And if you still don't know which wing it's from, what's taking so long, since it's been almost four days since that discovery?

KOSTELNIK: This is Mike Kostelnik.

I think they have identified that they have at least one piece of the left wing. And clearly you have to understand that when you go out into the field and look at this material, our own experts are having a difficult time determining what some of these objects are. And, of course, we're not just finding them, but we're cataloguing them and bagging them to get them back to the reconstruction site just as quickly as we can.

So as Mr. O'Keefe pointed out, many of these things are now leaving the field and reporting to one of the collection sites, and this material will start to be moved very rapidly to the reconstruction site at the Kennedy Space Center to arrive, the first few shipments, this week.

So there is a lot of activity ongoing over a wide spectrum of material parts, and this morning in the updates that were, you know, quite a few fairly large pieces that have been discovered that are starting to get under the scrutiny of the engineering community at the Johnson Space Center. And these are being handled just as expeditiously as they can to support the engineering analysis that may be needed to help support this understanding.

QUESTION: Just to follow up, can you tell where on the leading edge of the left wing that this piece may have come from?

KOSTELNIK: I think this morning they thought that they had identified the section. I don't know exactly which section that is along the wing. And there wasn't certainty among the people who had recovered it as to for sure, you know, which piece it was.

These are the kind of things, again, that are getting back to the collection areas, and for the key pieces that are coming in, the engineers that are doing analysis are actually sending representatives to the collection site at Barksdale to take a much closer look at the pieces that we're recovering.

QUESTION: One last question about that particular piece. Is there any possibility that the serial numbers were somehow removed or burned off from that piece, and that that's why it's taking a while to identify it?

KOSTELNIK: No, I think early on we had talked about we thought perhaps that there were tiles attached to the structure. This was a piece, the leading edge is made out of the reinforced carbon-carbon.

I'm not sure that actually the carbon-carbon pieces do have serial numbers on them. Of course, the tiles do. And in this area I believe they did recover a tile, obviously, that would have had the serial number. I do not know whether the RCC piece, this is the carbon piece, the leading edge wing does, in fact, have a serial number.

But, of course, these are the kinds of things that the engineers will take a very look at and deal with the facts from the actual pieces at either the assembly areas at Barksdale or Carswell or, in

fact, at the reconstruction site where we really need to get these pieces back and get the engineering analysis ongoing.

QUESTION: Has there been any enhancement work with the telescope picture from Kirtland Air Force Base, and if so does it reveal anything more?

And is there any further analysis on the meaning of the tracking data from orbit showing the little blip leaving the shuttle a day after launch?

KOSTELNIK: Well, I'll be happy to address that. Of course, we published the image and you can see there's a very low resolution image of the item.

Just to give you a sense for how the program is going forth and analyzing those images, they're creating some small engineering teams, in some case with contractor support, to send these images out for further analysis through various independent reporting activities to make judgments as to what these things mean.

They're still looking at that particular photo and have made no engineering judgments at this time.

QUESTION: For Mr. O'Keefe: You keep talking about openness and yet many of the things we don't--you say we get we don't really get here.

Can you right now just simply say to NASA workers and contractors that if they have something to say about the processes, the safety issues, that there will be no retribution from NASA or its contractors, and actually also release some of the documents you say you released, like the Southwest Research Institute document, the Boeing analysis, and tell us who was on the impact study team?

O'KEEFE: Sure, absolutely. I think we've attempted to put out the word to all folks that what we're trying to do is gather the information and the evidence.

The only two areas that we've been very clear about discussing as to any limitations, however brief they might be, is on national security-derived information, in terms of just the sources and method information that they get, and even there we've been able to expedite the clearances of releasing a lot of what General Kostelnik just described were cases where we've received some imagery from the Air Force that was made available in pretty short order.

So there are some things we need to be sensitive to and mindful of in terms of the sensitivity of the data that we're receiving, but those are in very, very small, limited cases.

The other example or other case is where individuals, and there have been some who have contacted us and advised that they think they have some information, some piece of evidence, some image, some photograph, some, you know, film footage, whatever, that they think is particularly pertinent, but they will not release it until such time as they've received assurances of the proprietary value to them personally of that information once released to us.

We've even figured out how to move the lawyers expeditiously. Now, there's a mean feat, getting the lawyers to come to closure on that question fast, because that means billable hours are really reduced a lot, I guess.

But it really is even a case where there we've been able to work out procedures and understandings with individuals for whatever motivation they have as to what it is they want assurances about in order to obtain the information, and then we've released it to the public as

quickly as possible so that they would have or maintain the proprietary rights or whatever else in dealing with that evidence in the future.

So we've been able to work through all of those. And I have no problem whatsoever to unequivocally endorse the premise of the question, which is, yes, indeed, release or make available all the information there. And as a consequence, we're trying to gather that data as expeditiously as we can and have it all contribute to ultimately find the answers to what caused this terrible accident.

With that, I want to apologize for exiting here, but I appreciate your willingness to be here. Both Bill Readdy and Mike Kostelnik will be here, as well, to try to work through the balance of your questions.

But thank you all for your patience.

QUESTION: For Mr. Readdy, I wondered if you can be any more specific about plans that have been discussed for the International Space Station, for instance, reducing the number of crew to two because of water constraints or doing any kind of crew exchange on a Soyuz.

READDY: Well, that's certainly the trade space. And we're looking at all our options right now. We don't have any decisions to make here in the next couple weeks. So that's in the trade space at the moment. We really have no idea how long we're going to have the space shuttle manifest on hold. So we're looking at that.

And as the administrator said, our preliminary look with Bill Grussenmeyer (ph) and his space station team has said that we've got at least through June in terms of consumables and over a year in terms of propellants. So it's not a matter of any real urgency at the moment.

QUESTION: To address some of Mr. O'Keefe's earlier comments about the openness. The Goddard orbit information group, which includes the kablairian (ph) elements to the shuttle, had all of the elements for the STS-107 mission until two or three days after landing on February 3 when they put up an announcement saying that all data was embargoed until the investigation was finished.

This seems in contradiction to the openness comment that anything you have, we have. This is data that was released during the mission. Why is it embargoed now? I understand the investigation report needs access to it, but why can't the rest of the world get access to it?

And there's a story in the Jerusalem Post on Sunday that says that the image from Kirtland Air Force Base that was released by NASA public affairs on the web site is about half the resolution of the actual image that you people are analyzing.

QUESTION: And any comments about that?

READDY: Well, let me take your first question first, and that is, in terms of embargoed data.

I think it's prudent to do that. In fact, an independent accident investigation board would insist on it. And as they go through the body of evidence they can release certain parts of it.

And we understand your concern and we'll certainly press to have as much available as soon as possible.

Mike Kostelnik might be able to discuss the imagery that you mentioned.

KOSTELNIK: I saw what I think to be an original copy of the image, and the resolution was what it was. I think they're going back now and trying to enhance some of the imagery we have through a lot of other (inaudible), but that image was just what it was.

QUESTION: To go back to one of the questions and maybe get the other half of a question that was asked earlier, about the blip that may have been reported on the second day of orbit. But in a larger sense, what other assets may have been looking at the shuttle when it was on orbit or during its return, and what have you gleaned from those assets?

READDY: Well, I think, first of all, after the accident we made a request to all agencies of the federal government to bring forward whatever information they might have had.

What you're referring to is post-processing of data that they were collecting. There will be other places like that--FAA radars, for example--as we try and narrow the search for some important components of the space shuttle. Doing trajectory analysis of where the breakup occurred, we may be able to use FAA radars, for example, weather radars, things like that.

So we're trying to get all sources of information that we can, put them into a database so that we can correlate that with respect to time, narrow the area that we're searching for clues that might unravel this accident investigation for us.

QUESTION: Good afternoon. This question is for General Kostelnik.

General, you said you've collected 12,000 pieces so far of the orbiter. Do you have any idea about how much of the orbiter that actually is? How has the debris recovery effort gone on the lakes in Texas today? And how much longer do you foresee any collection going on over the next week?

KOSTELNIK: Well, I think the collection is going well from the report today of the pieces that are known. And I think that we're rapidly now getting our processes together, the recovery protocols, the bagging and tagging, the removal to the distribution centers, the loading on the vehicles, and what rapidly will begin the transmission--transportation of these items to the recovery site, the reconstruction site at the Kennedy Space Center.

So we know a lot about--what we know, it's very difficult to try to get some guess in terms of what percentage of the orbiter do we actually have recovered. It's easier to quantify the known sites and the number of those that are connected. It's much more difficult to get a handle either on the weight, the mass, you know, the composition.

So I think that'll be a very difficult metric to have, at least for the next few days until we get more of the pieces back to the Kennedy Space Center.

And I think, certainly, the larger, heavier masses will provide some abilities to account for things, and at some point, I think, there will be some sense as for what part we have actually recovered.

I think the tough work that remains, or a lot of the questions, we do know that a lot of debris went into the lakes. There's a lot of lakes, and particularly in the eastern part of Texas and the western parts of Louisiana, where some of the heavier objects went.

There were eyewitnesses that actually saw a lot of the debris into the water, and obviously, I think you know, we have dive teams and a lot of people working the underwater part. That will take more time to recover those, and we still have a lot of work to do in that regard.

And also, in this same area there is a lot of wooded areas, a lot of dense forest in and around these lakes, and we know that there is a lot of material that went into these regions, as well. And as you might suspect, it's much more difficult to locate those pieces.

So much of the effort over the next few days for the people on the ground will be working in these areas, trying to understand where these pieces are that we have not yet found. And there could be a fair amount of that material.

I think you know the weather has been kind of rainy with low ceilings over the last few days in Texas, and that has made it difficult for some of our airborne assets that I mentioned to you, using side-looking radar to help penetrate the foliage and help to find some of these larger pieces.

We're doing a good job on the pieces we know. As I mentioned, most of the clear, you know, public areas, of public safety, are fairly clear, the churches, the schools, the main thoroughfares. But increasingly there's still some work to be done in these areas we know less about.

QUESTION: You were a little vaguer than perhaps we may need on the question of the wing, so I just wanted to see if we could sort out, is the left wing that you've referred to the one that was found west of Fort Worth?

If so, is that the westernmost piece of debris that has been found so far? Was there any sign of burn-through in either the leading edge or the tile? And what would it tell you, if anything, that that was the piece found furthest west?

KOSTELNIK: This is the piece that we talked about earlier on that they were very interested in, a piece of the reinforced carbon-carbon wing structure.

I'm told today that contrary to the early reports this piece was actually found farther to the east of Fort Worth than we thought, actually closer to the Lufkin area, and still to date the characterization of the pieces found furthest west are still roughly in the Fort Worth area, although we still have this sense that there is material further west, we're still looking at other sensor sources to see if we can get some lay-down of what this material might be.

But as of this morning we still have only confirmed parts in the Fort Worth area, nothing farther to the west.

QUESTION: Burn-through, I'm sorry?

KOSTELNIK: No, I have no information on that.

And certainly that's something that the engineers would be looking for, but I have no characterization from the field on that issue.

QUESTION: (OFF-MIKE) the western-most piece that you found?

KOSTELNIK: I can't confirm that. It was just one of those that was characterized to be in this Fort Worth area that we thought was the pieces that were furthest west.

QUESTION: General, any update on that radar blip, object scene leaving the area of the shuttle second day of mission? What was it? Was it something in fact?

KOSTELNIK: That's a good point. And I think the answer to that is very typical of what we're doing with the photo image. In fact we have a couple photo images that we're putting into small study groups to get the right kind of people looking to see what these things could be. This was characterized as the lightening strike photo out in California, in the West Coast. This is another one of those images that is being studied carefully to see what it really means, the photo that everybody's now seen on the picture taken in New Mexico.

And as far as the object in space, this was another one of these areas that a large ground-based Air Force radar was scanning during the window, as many of our sensors in the Department of Defense are actively looking, a kind of (inaudible) antennae, and then after the event with the data call to go back to the DOD and say what other sensors were out there. This was a request to go back and to run the tapes and see if anything--any anomalies were observed.

And in this instance, this piece of space debris with the characterization that has been accurately reported in the media was found on the tape by the Air Force, and they are continuing in the process now of trying to confirm their calculations that based on where it was when they found it, that on (inaudible) mechanics it would have backed up to be on the second day of the orbiter's mission in the general vicinity of the orbiter so much that it could have been something associated with the orbiter.

To get a sense of what's going on, so the Air Force is then going back to reconfirm their calculations and their information to pass this to the engineers. But also the engineers are looking at the shuttle, at this particular time on orbit, to take a look at everything that we knew about that. Was there anything that the crew noticed? Were there any measurements on the shuttle that would've detected some impact or some movement? I mean, we're going to an incredible amount of detail with everything we know about that time period to have some sense for what it could be.

I think you know that there are emissions from the shuttle in terms of water dumpages and so forth that sometimes manifest themselves as ice. There are some thought this could be that kinds of thing.

So we're looking at all the events on the shuttle during that time period to try to correlate this other information. In fact, much of our activity, through all these different sources with photos, with visual pictures, with radar pictures and infrared pictures, try to correlate this data to help us understand what we are.

So what we know right now is what we have, as a matter of fact, what the program is trying to do is to correlate those facts to see if they lead us to any conclusion. That has not been reached at this point.

QUESTION: Just to clarify on the debris again. The furthest west piece of debris is not this carbon-carbon section you were just talking about. Is there any way to characterize what the farthest west piece of debris is at this point?

KOSTELNIK: I really don't know the answer to that, but perhaps we could take that and have, you know, have that provided for the record.

In our conversations this piece of RCC was what we thought towards the end of the field, the characterization has been from the team that there are recoveries in and around the immediate Fort Worth area. And they continue to look northwest of the city, but I just can't tell you precisely, you know, what they found there and what type of material it would be at this point.

QUESTION: Bill, I wanted to ask you if your Russian partners have laid out any timetable for making any decision about whether additional Progress and Soyuz would be needed so that you can preserve the option given that there's a lead time in ordering additional ones.

READDY: That's a good question. As I said, we're considering a number of things in the trade space here, not knowing how long the shuttle fleet might be grounded. And we've gotten tremendous support from all the international partners, most particularly the Russians.

I think today it was reported that Mr. Koptev had been speaking, I guess, with the Indian press, and just talked about the fact that we had experienced the Columbia mishap and the fact that the shuttle fleet was down, and that meant that the Russian partners were going to have to step up to their obligation on crew rotation and also logistics.

So they understand that. I think they've made that commitment very clear. And we're going to continue to work with them to resolve this.

QUESTION: On January 27, Johnson Space Center contacted NASA Langley to ask about flight performance, if one or two of the Columbia's tires failed to inflate at landing. What was going on with the shuttle on or before January 27 that caused NASA to be concerned about the possibility of tires not inflating?

READDY: I'm not familiar with that particular request. And we'll certainly research it for you and get back to you.

QUESTION: As far as the International Space Station goes, at what point will you have to make a decision if you want to exchange the crew out in the April Soyuz mission? And if that is the option you choose, what will you have to do to accomplish it?

READDY: OK. We'll, I'll give you my first cut at it, then defer to my colleague Mike Kostelnik, who is the program executive officer.

Discussions we had last Friday at the Johnson Space Center pretty much set the stage for here are the drivers, and one of them is how long the shuttle will be grounded. The next one is the amount of autonomy that you still have with the existing Soyuz TMA model that is docked to the space station.

The current baseline, I think, is for it to launch the next one on the 26th of April, if I'm not mistaken. And that would result in the current one on orbit coming down after 188 days. Typically, the Russians like to limit it to about 200. And being that this is the first flight of the Soyuz TMA, we think that that's probably about where they would feel comfortable on this particular flight. So I think that winds up being one of the pacing items in terms of a crew exchange.

And we'll, obviously, consult with the Russians on how we strategize for the next increment and all the rest.

Mike?

KOSTELNIK: And the only thing I'd add, of course, there are a lot of plans that we'd have to take into place on, you know, who we would send up. Would it be prudent to change the composition of the crew, given the circumstances that we're in? And of course, the long pole in this tent would be the training for whichever crew we decide to go forward with.

That decision, in terms of training, would probably need to be made in the pretty short-term. Within the next week or so we would have to make a decision as to whether at least start another crew in training as a fallback, you know, until we learn more about what the impact is going to be on the shuttle.

But clearly, the taxi flight in April gives us a lot of flexibility to do the right kinds of things for the information that we know. And so, as we speak, the members of the International Space Station are working very closely with the international partners to come to an agreement as to what is the best plan in this interim.

First and foremost, to keep the crew on orbit safe. I mean, now that's one of our primary focuses. Second, to keep the International Space Station safe and productive as we can. And there will be a lot of discussion over this in the next few weeks.

QUESTION: Just two questions about the Gehman board. One, with the reconstruction being moved to KSC, will the Gehman board be setting up the base of operations there? And if so, when will they be doing that?

And the other question is, I guess a chain of command question. Who will Admiral Gehman be reporting to within the agency, directly to the administrator or somebody else?

READDY: Well, the Gehman board right now is locating off site near the Johnson Space Flight Center. I think they're going to have a press availability tomorrow afternoon, so it's probably best to go ahead and ask them.

I presume that we'll be consulting with them in terms of the reconstruction effort that's going to take place there at the shuttle landing facility hanger. And we'll have a facility set up where they can operate out of close by. But that's probably a better question for him tomorrow.

STAFF: Thank you, gentlemen.

Before we close, a couple of reminders. The crew of the Expedition Six holds its first press conference tomorrow morning at 9:34 Eastern time.

And details are still being worked out for a possible press briefing with Admiral Gehman and members of the Space Shuttle Accident Investigation Board tomorrow after. That briefing will originate from the NASA Johnson Space Center in Houston. We'll issue a release as soon as the details are made final.

Thank you very much for joining us today. Good afternoon.